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The Observatory of the *Société Astronomique de France (SAF)*
at the Sorbonne University

By

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At the end of the 19th century, Parisian professional astronomers used two observatories: the Paris Observatory which was erected in 1672 at the southern extremity of the old city and the Meudon Observatory which was created in 1876, ten kilometers south-west of the center of Paris, using the buildings of an existing palace.

In 1883 Camille Flammarion installed his own observatory at Juvisy, 20 kilometers south of Paris, also on the top of an existing building, with a 24 cm refractor. He was an amateur astronomer, although he also worked at the Paris Observatory from time to time.

In 1887, he founded the *Société Astronomique de France (SAF)*, an association of professional and amateur astronomers for the promotion of astronomical science. It was installed in the *Hôtel des Sociétés Savantes* (residence of learned societies), in the heart of the Latin Quarter of Paris. A cupola was erected on the top of the building in 1890, housing a 108 mm refractor, and another one in 1900 with a 190 mm refractor.

At the same time, the Sorbonne University underwent complete reconstruction, which was completed

in 1901. It had in fact been previously reconstructed between 1626 and 1653, under the supervision of Richelieu, the prime minister of Louis XIII. After Richelieu's reconstruction, nothing remained of the Sorbonne from the middle ages. After 1901, the only remaining part of Richelieu's Sorbonne was the church where he had been buried. Also, the existing sundial, installed in 1876, was reinstalled at the north side of the main quadrangle, facing the church.



The highest part of the new buildings is the Astronomy Tower, which is crowned by two cupolas. The upper cupola was equipped with an equatorial mount supporting a 241 mm refractor for observations and a 219 mm refractor for astrophotography.

The lower cupola contained a meridian circle. Both cupolas are still visible above the roofs of the Latin Quarter, as well as those of the *Hôtel des Sociétés Savantes*, the *École Polytechnique* and the *Institut Henri Poincaré*.

However, the Sorbonne observatory stopped its activities as early as 1909, partly because the maintenance of the instruments was too difficult, and partly because of the increasing light pollution in the center of Paris. The main instrument was taken to the Paris Observatory where it was used until 1940. No further astronomical observations were to be performed in the Astronomy Tower until 1980. It was, however, used as an observation point in August 1944, during the fight for the liberation of Paris. Some bullet holes are still visible on the outside of the walls just below the main cupola.

On the other hand, Camille Flammarion's observatory in Juvisy was quite active, both for observation and astrophotography. After his death in 1925, it was supervised by his widow Gabrielle until her death in 1962. Eugène Antoniadi, the well-known Mars specialist, worked there between 1895 and 1902. Afterwards, Ferdinand Quénisset, who did a lot of observation and astrophotography, worked there until 1951. He also discovered two comets from the Juvisy observatory.

After 1962, the ownership of the building was shared by the *SAF* and the city of Juvisy. Because of a lack of money, it gradually went into decay, even though some roof repairs were undertaken during the seventies. Only recently, it obtained the status of «monument historique» and both the cupola and the refractor were restored. I am presently in charge of the final arrangements before the reopening of



the observatory, and I hope that I can soon report on the first observations. The other parts of the building are still in need of a lot of repair.

The observatory at the *Hôtel des Sociétés Savantes* was also quite active. It was open twice a week for public observations, generally directed by professional members of the *SAF*. The other activities were astrophotography and observation by amateur members of the association, many of whom later became professionals. In 1935, the 108 mm refractor was replaced by a 153 mm refractor made by Manent, with a motor for the right ascension axis. During the German occupation of Paris, the cupola which contained the 190 mm refractor stopped working. In 1952, it was repaired and the 190 mm refractor was replaced by a 215 mm refractor.

Unfortunately, in 1968, the Academy of Paris, which was the owner of the *Hôtel des Sociétés Savantes*, recovered the building in order to use it in a different way. It is presently the *Maison de la Recherche* of Paris-Sorbonne University. The address is 28 Serpente street. As a result, the *SAF* had no observatory for a period of ten years. In 1976, a new convention was signed with the Academy of Paris, which placed the Astronomy Tower of the Sorbonne at the disposal of the *SAF*. This convention has to be renewed every 15 years.

It turned out that some repairs of the cupola were necessary. These were done by the *SAF* which also installed a new system to rotate the dome and a concrete pillar to support the instrument. The 153 mm refractor which came from the *Hôtel des Sociétés Savantes* was installed on the pillar, and could be used again for observations starting in October 1980. The 215 mm refractor coming from the same place was lent by the *SAF* for the creation of an observatory open to the public in Triel, 30 kilometers west of Paris, where it is still used.

Currently, the four levels of the Astronomy Tower are occupied by two different activities: observation in the upper cupola and the grinding and polishing of telescope mirrors in the lower areas.



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The SAF's Instrument Committee consists of approximately 50 members. Most of them are interested in making their own telescopes, which are generally, but not always, Newtonian. They meet on



Tuesday evenings and Saturday afternoons in the Astronomy Tower where they can grind, polish, and check the mirror for their instrument. Some stop after one mirror, but others want to make a bigger one afterward, or they stay mainly to help others. The mirrors that are made here are usually between 20 and 40 centimeters in diameter.

Level 0 of the Astronomy Tower, about 20 metres above Saint-Jacques Street, is the only one which is accessible by elevator. Presently, the elevator is out of commission for a period of 3 years, because of extensive repair work now underway in the university. On level 0, the Foucault test is used to

check the parabolic shape of the mirrors. It can detect defects of as little as 10 nanometers. In fact, the device is quite simple so that it was made completely by hand.

Level 1 is used to grind and polish the mirrors, which is also done completely by hand, rubbing two pieces of glass against each other with an abrasive product between them. The lower piece becomes a convex tool and the upper piece becomes the concave mirror. Level 1 is divided into two parts. The first room is used to initially grind the surface of the mirror and give it a spherical shape.

The second room is circular, being just under the lower cupola, which no longer contains the meridian circle. In that room, the mirror is given its final parabolic shape and is polished. This is the moment when the Foucault test must be performed, often many times, before the shape is perfect. Subsequently, the surface of the mirror is covered with a thin coating of metal, so that light can be reflected completely. This is done in another room belonging to the SAF.

Level 2 is a large square room just beneath below the upper cupola, with windows on all four sides. From there, we have a superb view of old Paris, including the Panthéon, Notre-Dame cathedral, the Eiffel Tower, and Sacré-Coeur of Montmartre. This level is used to prepare observations and receive visitors. Levels 2 and 3 are only accessible via a narrow wooden staircase, so that the number of visitors is limited to 6.

Level 3 is the circular room covered by the upper cupola, 39 meters above street level. It is possible, but not necessarily recommended, to walk outside around the cupola.

At the present time, this is the only observatory within Paris which is regularly open to the public. Twice a week, on Monday and Friday evenings, the 153 mm refractor is used to observe with the visitors the Moon, the planets and a few deep sky objects such as double stars and the most brilliant nebulae. For such objects, the images are often



sharper than those of larger telescopes. Both the 7 ton bronze cupola and the instrument are moved by hand, except for small corrections with the right ascension motor, which also turns the instrument to compensate for the rotation of the earth.

I organise the visits in such a way that each of the

11 presenters, including myself, receives the public about once a month. If the weather is not good, we can illustrate the inversion of the images by the instrument by observing, for example, signs on far-away buildings, or people walking in the restaurant of Eiffel Tower. Also, each presenter can use the instrument for his own observations and receive friends at the observatory.

For instance, I enjoy observing the Sun by projection on a screen until sunset. At the beginning, the sunspots are quite visible. Then the shape of the Sun becomes oval with a green line at the top and a red line at the bottom. More and more birds, and even planes, are seen crossing the image. Sometimes, the shape of the Sun becomes irregular because of refraction phenomena in the atmosphere. Exceptionally, details of the horizon appear in the image at the end, for instance leafless trees of the Meudon forest at the winter solstice or people walking on the terrace of Arc de Triomphe at the summer solstice.

Acknowledgements: I would like to thank Charles White for helping to improve the English and the presentation of this text. The photographs were taken by my wife Yoko Oger.

CMO/ISMO 2011/12 Mars Report #06

2011/2012 Mars Observations in January 2012

♂..... This 6th report treats the Mars observations of the ISMO made in January 2012. During the period the planet attained a stationary at *Vir* on 25 January and began to return to *Leo*. The Martian season proceeded from $\lambda=051^\circ\text{Ls}$ to $\lambda=065^\circ\text{Ls}$ and the apparent diameter augmented from $\delta=9.0''$ to $\delta=11.7''$. The tilt remained around $\phi=23^\circ\text{N}$ so that we could observe deeply northern hemisphere. The phase angle rapidly decreased from $\iota=34^\circ$ to $\iota=23^\circ$. The thawing of the npc proceeded and the inside of the P-ring (defined earlier) shows the aspect of the residual cap. There observed a precursory sign of the migration of the water vapour and the evening clouds around Tharsis were now quite active.

♂..... We received observations from the following observers. BUDA (*Sbd*) in Australia is very welcome, and at the Philippines the rainy season seemed to have ended so that AKUTSU (*Ak*) must have become active.

ABEL, Paul G (*PAb*) Leicester, the UK

4 Colour Drawings (13, 24 January 2012) 310, 250×20cm speculum

AKUTSU, Tomio (*Ak*) Cebu, the Philippines

9 Sets of RGB + 7 Colour + 5 L + 9 IR Images (19, 24, 27, 28, 30 January 2012)

36cm SCT @f/35 with a DMK21AU04, DFK21AU04

BUDA, Stefan (SBd) Melbourne, Australia

2 Sets of RGB +1 Colour images (15, 21, 28 January 2012)
40cm Dall-Kirkham with a DMK21AU04

FLANAGAN, William (WFl) Houston, TX, the USA

8 Sets of LRGB Images (3, 7, 14, 15, 28, 30 January 2012) 36cm SCT @f/27 with a Flea3

GHOMIZADEH, Sadegh (SGh) Tehran, Iran

7 Colour + 1G + 1B Images (15, 16, 21, 22, 23, 29 January 2012)
(28cm SCT with a DMK21AU04.AS)

GORCZYNSKI, Peter (PGc) Oxford, CT, the USA

11 Sets of RGB + 4 R + 15 IR Images (1, 3, 4, 7, 11, 15, 16, 22, 28, 30 January 2012)
36cm SCT @f/28 with a DMKAU618.AS

KOHZAKI, Ichiro (Kz) Higashi-Kurume, Tokyo, Japan

14 Drawings (6, 8, 10, 13, 17, 18, 25, 27 January 2012) 340, 480×20cm speculum

KONNAI, Reiichi (Kn) Ishikawa, Fukushima, Japan

6 Drawings (7, 9, 13, 29 January 2012) 380, 500×30cm SCT

KUMAMORI, Teruaki (Km) Sakai, Osaka, Japan

6 LRGB Colour + 6 B Images (9, 17, 26, 27, 30, 31 January 2012)
28cm SCT @f/70, 80 with a DMK21AF04/DFK21AF04

KOWOLLIK, Silvia (SKw) Ludwigsburg, GERMANY

8 Sets of RGB Images (15, 16, 18 January 2012) 20cm speculum with a DMK31AF03.AS

MAKSYMOWICZ, Stanislas (SMk) Ecqueville, France

1 Set of Drawings (17 January 2012) 250×20cm Cassegrain

MELILLO, Frank J (FMI) Holtsville, NY, the USA

5 Colour + 1 B[#] Images (1, 7[#], 16, 29 January 2012)
25cm SCT with a ToUcam pro II / Starlight Xpress MX-5[#]

MINAMI, Masatsugu (Mn) Fukui City Observatory*, Fukui, Japan

19 Drawings (8, 16, 17, 31 January 2012) 400×20cm Goto ED refractor*

MORALES RIVERA, Efrain (EMr) Aguadilla, Puerto Rico

4 Sets of LRGB Images (2, 9, 22, 27 January 2012) 31cm SCT with a Flea3

MORITA, Yukio (Mo) Hatsuka-ichi, Hiroshima, Japan

8 Sets of RGB + 8 LRGB Colour + 8 L Images (8, 9, 16, 17, 21, 23, 25, 28 January 2012)
25cm speculum @f/80 with a Flea3

MURAKAMI, Masami (Mk) Fujisawa, Kanagawa, Japan

20 Drawings (2, 7, 13, 14, 17, 25, 27, 30, 31 January 2012) 320×20cm F/8 speculum

NAKAJIMA, Takashi (Nj) Fukui City Observatory*, Fukui, Japan

18 Drawings (8, 16, 17, 31 January 2012) 400×20cm Goto ED refractor*

PARKER, Donald C (DPk) Coral Gables, FL, the USA

6 Sets of RGB + 1 UV Images (2, 8, 11, 18, 24[†], 27[†] January 2012)
41cm F/6 speculum @f/47, 36cm SCT[†] @f/48 with a DMK21AU618.AS

PEACH, Damian A (DPc) Selsey, West Sussex, the UK

1 Set of RGB +2 Colour + 2R + 1B Images (17, 27 January 2012) (36cm SCT with a SKYnyx 2-0M?)

PHILLIPS, James (JPh) Charleston, SC, the USA

1 Colour Image (29 January 2010) 20cm Refractor (with a SKYnyx cam)

POUPEAU, Jean-Jacques (J²Pp) Essonne, France

4 Sets of RGB Images (13,~15, 17 January 2012) 35cm Cassegrain with a SKYnyx 2-0

SMET, Kris (KSm) Bornem, Belgium

3 Colour Drawings (4, 15 January 2012) 420, 220×30cm Dobsonian

TATUM, Randy (RTm) Henrico, VA, USA

1 Colour Image (1 January 2012) 25cm speculum with a DFK31AU

WARELL, Johan (JWr) Skivarp, SWEDEN

3 Sets of RGB Images (15, 19, 31 January 2012) 22cm speculum @f/31,17 with a ToUcam pro III

WESLEY, Anthony (AWs) Murrumbateman, NSW, Australia

1 IR Image (19 January 2012) 41cm speculum with a Grasshopper Express

WILLEMS, Freddy (FWI) Waipahu, Hawaii, the USA

8 Sets of RGB + 1 RGB + 9 Colour + 5 IR Images (1, 5, 7, 8, 14, 19, 23 January 2012)
36cm SCT with a DMK21AU04.AS, DBK21AU618.AS

♂.....We Further Received as follows:

GORCZYNSKI, Peter (PGc) Oxford, CT, the USA

1 Set of RGB + 1 IR Images (2 November 2011) 36cm SCT @f/28 with a DMKAU618.AS

WILLEMS, Freddy (FWI) Waipahu, Hawaii, the USA

2 Sets of RGB Images (7, 12 September 2011) 36cm SCT with a DFK21AU04.AS

♂.....There are several points which are worth of special mention among the observations in January:

First the images of the npc on WILLEMS (FWI) at Hawaii made on 19 Jan ($\lambda=059^\circ\text{Ls}$) at $\omega=149^\circ\text{W}$, 157°W show an inlet outside the P-ring and it can be considered as the precursory of the eastern end of Olympia.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120119/FWI19Jan12.jpg>

FLANAGAN (WFI)'s images on 15 Jan ($\lambda=057^\circ\text{Ls}$) at $\omega=103^\circ\text{W}\sim 115^\circ\text{W}$ also show a similar aspect, though the images are somewhat blurred. So we can consider that Olympia comes out around this time: Usually the clear shape of Olympia is said built around $\lambda=064^\circ\text{Ls}$ (cf CMO #183 in 1997), and hence the present observations are highly precious in the sense it detected the very beginning of Olympia-Ierne.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/WFI15Jan12.jpg>

Next, Bill(WFI) captured a beautiful Syrtis Mj near the terminator in a pure greenish tint on 28 Jan ($\lambda=063^\circ\text{Ls}$) at $\omega=337^\circ\text{W}$; it was just like a gem of jade.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120128/WFI28Jan12.jpg>

On 30 Jan ($\lambda=064^\circ\text{Ls}$) also he caught at $\omega=321^\circ\text{W}$ that the evening side of Syrtis Mj is also bluish.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120130/WFI30Jan12.jpg>

This is of course not the blue cloud, but the phenomenon that the white cloud refracts back the short wavelength lights to the direction of the Earth: See for example the CMO Site:

<http://www.hida.kyoto-u.ac.jp/~cmo/cmo/note/9901/01.html>

from 25 November 1999: The discussion was restricted to the morning side, but can easily be applied to the evening side. At the morning side, Syrtis Mj on MORALES (EMr)'s on 2 Jan ($\lambda=052^\circ\text{Ls}$) at $\omega=231^\circ\text{W}$ and the one on BUDA (SBd)'s on 15 Jan ($\lambda=057^\circ\text{Ls}$) at $\omega=225^\circ\text{W}$ look slightly bluish.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120102/EMr02Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/SBd15Jan12.jpg>

KONNAI (Kn) chased on 13 Jan ($\lambda=057^\circ\text{Ls}$) at $\omega=221^\circ\text{W}$, 231°W , 240°W : At $\omega=231^\circ\text{W}$ Syrtis Mj was not well clear but at $\omega=240^\circ\text{W}$ he noted it to be "very faintly bluish". KOHZAKI (Kz) later observed at $\omega=248^\circ\text{W}$, 257°W , 267°W ; and noted Aeria is light at the morning side, maybe a remnant of white clouds.

At Fukui, NAKAJIMA (Nj) and MINAMI (Mn) on 16 Jan ($\lambda=058^\circ\text{Ls}$) captured Syrtis Mj from $\omega=225^\circ\text{W}$ and on 17 Jan ($\lambda=058^\circ\text{Ls}$) from $\omega=216^\circ\text{W}$ (it is possible to see Syrtis Mj around from $\omega=213^\circ\text{W}$), but could not see the colour because of the poor seeing; just only saw a slightly bluish Syrtis Mj at $\omega=235^\circ\text{W}$.

Thirdly we stress that the water vapour was coming much southwards to the equatorial zone, and on the excellent images by PARKER (DPk) on 24 Jan ($\lambda=061^\circ\text{Ls}$) at $\omega=357^\circ\text{W}$, two small cloud are floating on

the sand region of Aeria and Arabia. Perhaps Chryse is also invaded by the water vapour.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120124/DPk24Jan12.jpg>

The orographic clouds at Tharsis and Olympus Mons are now well in season, and there are lot of observations so that we skip many of them. We just note Olympus Mons on GORZCYNKI (*PGc*)'s images on 7 Jan ($\lambda=054^\circ\text{Ls}$) at $\omega=152^\circ\text{W}$, 167°W look to show a shadow of the caldera ($\tau=33^\circ$). As well *EMr*'s images on 9 Jan ($\lambda=055^\circ\text{Ls}$) at $\omega=159^\circ\text{W}$ similarly show the shadow.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120107/PGc07Jan12.jpg>

DPk's set of images on 11 Jan ($\lambda=056^\circ\text{Ls}$) at $\omega=126^\circ\text{W}$ gives a complete assemble of the orographic clouds. *PGc*'s on the day at $\omega=124^\circ\text{W}$, 139°W also show the same aspect but the impression is different.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120111/DPk11Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120111/PGc11Jan12.jpg>

As examples where the water vapour were going southwards even in the morning, we shall pick out the case of Freddy(*FWI*) on 23 Jan ($\lambda=061^\circ\text{Ls}$) at $\omega=114^\circ\text{W}$ and the images of *SBd* on 28 Jan ($\lambda=063^\circ\text{Ls}$) at $\omega=090^\circ\text{W}$ where Olympus Mons is white already in the morning, and this shows the southward going of the water vapour.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120123/FWI23Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120128/SBd28Jan12.jpg>

As to Chryse, MELILLO (*FMI*) on 16 Jan ($\lambda=058^\circ\text{Ls}$) at $\omega=065^\circ\text{W}$ shows a strong mist at the evening side, while *PGc*'s images at $\omega=090^\circ\text{W}$ does not show it conspicuously. This may be due to the difference of the cameras and procedures.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120116/FMI16Jan12.jpg>

Since as to Alba there remain discussions, we pick out some: Near the CM, KUMAMORI (*Km*) and AKUTSU (*Ak*) captured it on 26 Jan ($\lambda=062^\circ\text{Ls}$) at $\omega=106^\circ\text{W}$, and on 27 Jan ($\lambda=063^\circ\text{Ls}$) at $\omega=084^\circ\text{W}$ respectively (on 27 Jan, *Km* also caught at $\omega=085^\circ\text{W}$).

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120126/Km26Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120127/Ak27Jan12.jpg>

Alba is apparent in B. *Ak*'s 28 Jan ($\lambda=063^\circ\text{Ls}$) at $\omega=081^\circ\text{W}$, 090°W , 101°W also show it clearly. It is also clear on MORITA (*Mo*)'s on 25 Jan ($\lambda=062^\circ\text{Ls}$) at $\omega=124^\circ\text{W}$. It is interesting to see the RGB colour of Alba on *SBd*'s images on 28 Jan ($\lambda=063^\circ\text{Ls}$) at $\omega=090^\circ\text{W}$.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120125/Mo25Jan12.jpg>

KONNAĪ (*Kn*) saw the white spot of Alba visually on 29 Jan ($\lambda=064^\circ\text{Ls}$) at $\omega=129^\circ\text{W}$ even under unfavourable condition. We shall note also in the abovementioned images of Freddy(*FWI*) on 19 Jan ($\lambda=059^\circ\text{Ls}$) at $\omega=149^\circ\text{W}$, 157°W , there runs an interesting projection of a cloud from Alba to Olympus Mons and it is especially conspicuous in B of the former set images.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120119/FWI19Jan12.jpg>

Elysium looks variable according to the cameras and the procedures: *FMI*'s image on 1 Jan ($\lambda=051^\circ\text{Ls}$) at $\omega=210^\circ\text{W}$ shows it whitish, while on *PGc*'s images it is not so at $\omega=218^\circ\text{W}$: On the latter the P-ring is evident. Freddy(*FWI*)'s images do not show Elysium which was gone, but the P-ring is obvious and Hellas is dull (ground-like). *DPk*'s image set on 2 Jan ($\lambda=052^\circ\text{Ls}$) at $\omega=207^\circ\text{W}$ shows Elysium near the CM and it is evident in B but the cloud is not so in RGB. It is also similar in *EMr*'s image at $\omega=231^\circ\text{W}$ on the day. *PGc*'s images on 3 Jan ($\lambda=052^\circ\text{Ls}$) at $\omega=198^\circ\text{W}$ also show Elysium near the CM to be dull.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120101/FMI01Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120101/PGc01Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120102/DPk02Jan12.jpg>

From Japan, *Km* shot on 17 Jan ($\lambda=058^\circ\text{Ls}$) at $\omega=205^\circ\text{W}$, but on B it is quite dull (while Phlegra looks

faintly broad in LRGB). *Kz* seems to have checked the area at $\omega=210^\circ\text{W}$, 220°W . *Mo*'s image set on 17 Jan ($\lambda=058^\circ\text{Ls}$) at $\omega=194^\circ\text{W}$ shows Elysium in B but it is dull in RGB. *Ak*'s images on 19 Jan ($\lambda=059^\circ\text{Ls}$) at $\omega=199^\circ\text{W}$ also show the similar tendency.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120117/Km17Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120117/Kz17Jan12.jpg>

P-ring was also checked this time by many imagers. *Bill(WFl)*'s set of images on 3 Jan ($\lambda=052^\circ\text{Ls}$) at $\omega=229^\circ\text{W}$ shows a faint mist ejected from the outer bright ring outside the dark P-ring.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120103/WFl03Jan12.jpg>

On 7 Jan ($\lambda=054^\circ\text{Ls}$) at $\omega=190^\circ\text{W}$, *WFl*'s images show the P-ring very clearly at the eastern side of the npc: This must be related with the the thawing of the outer-ring and the appearances of islands.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120107/WFl07Jan12.jpg>

On *WESLEY (AWs)*'s IR image on 19 Jan ($\lambda=059^\circ\text{Ls}$) at $\omega=181^\circ\text{W}$, the P-ring is evident. It generally looks the inside (the residual cap) of the P-ring is less bright; accordingly the npc has been weaker than before.

Hellas was observed, in addition to *Freddy(FWl)* on 1 Jan ($\lambda=051^\circ\text{Ls}$) (aforementioned), by *PHILLIPS (JPh)* on 29 Jan ($\lambda=063^\circ\text{Ls}$) at $\omega=288^\circ\text{W}$ ($\phi=23^\circ\text{N}$) in which it was dull, while rather light on *Frank(FMI)*'s image on the day.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120129/JPh29Jan12.jpg>

MURAKAMI (Mk) also chased Hellas on 7 Jan ($\lambda=054^\circ\text{Ls}$) (as mentioned later), but it was dull, while seemed to become lighter near the evening side.

The interesting area of S Meridiani was shot densely: *KOWOLLIK (SKw)* took the area on 16 Jan ($\lambda=058^\circ\text{Ls}$) at $\omega=358^\circ\text{W}$, 006°W , 015°W , 025°W , and compared with her images on 18 Jan ($\lambda=058^\circ\text{Ls}$) at $\omega=348^\circ\text{W}$, 359°W , 007°W .

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120116/SKw16Jan12.png>

POUPEAU (J²Pp) also took the region on 17 Jan ($\lambda=058^\circ\text{Ls}$) at $\omega=357^\circ\text{W}$, and *PEACH (DPc)* did at $\omega=355^\circ\text{W}/357^\circ\text{W}$, 003°W on the day. Furthermore as abovementioned *DPk* showed excellent images on 24 Jan ($\lambda=061^\circ\text{Ls}$) at $\omega=357^\circ\text{W}$.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120117/JPp17Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120117/DPc17Jan12.jpg>

We shall note that 15 Jan ($\lambda=057^\circ\text{Ls}$) was a peculiar day when a lot of images were obtained from many countries: *SMET (KSm)* issued nice drawings at $\omega=346^\circ\text{W}$, 027°W ,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/KSm15Jan12.jpg>

WARELL (JWr) took at $\omega=008^\circ\text{W}$, and *JPp* at $\omega=026^\circ\text{W}$, *SKw* at $\omega=040^\circ\text{W}$ (both show the area of *M Acidalium*),

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/JPp15Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/SKw15Jan12.png>

Bill(WFl) took the images at $\omega=103^\circ\text{W}/107^\circ\text{W}$, $112^\circ\text{W}/115^\circ\text{W}$, and *PGc* at $\omega=103^\circ\text{W}$

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/WFl15Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/PGc15Jan12.jpg>

and *SBd* at $\omega=225^\circ\text{W}$.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/SBd15Jan12.jpg>

Finally *GHOMIZADEH (SGh)* shot at $\omega=290^\circ\text{W}$.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/SGh15Jan12.jpg>

The Japanese islands suffered from the typical winter-time weather. The region facing towards the Pacific Ocean had rather bright days but the seeing was very poor and the rear side of the island was both-ered by snow almost every day. *Mo* at Hiroshima captured *Syrtris Mj* and *S Sabaeus* on 8 Jan ($\lambda=054^\circ\text{Ls}$) at

$\omega=313^\circ\text{W}$, and on 9 Jan ($\lambda=055^\circ\text{Ls}$) at $\omega=304^\circ\text{W}$, but the seeing was poor. Kz at Tokyo also saw the similar aspect on 8 Jan. On 9 Jan ReichiKn at Fukushima only saw visually a dull Syrtis Mj near the CM (too duller to demonstrate his splendid ability to draw). On the day however TeruakiKm near Osaka obtained mediocre ccd images at $\omega=281^\circ\text{W}$.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120109/Kn09Jan12.jpg>
<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120109/Km09Jan12.jpg>

Kz also caught Syrtis near the CM on 10 Jan ($\lambda=055^\circ\text{Ls}$) at $\omega=285^\circ\text{W}$. Mo captures it on 16 Jan ($\lambda=058^\circ\text{Ls}$) at $\omega=255^\circ\text{W}$ near the morning side. Kz chased the "boring side" on 25 Jan ($\lambda=062^\circ\text{Ls}$) at $\omega=138^\circ\text{W}$, and on 27 Jan ($\lambda=063^\circ\text{Ls}$) at $\omega=120^\circ\text{W}$ but no positive results, though he paid attention to the size of the npc. Mo aimed at the Tharsis region on 21 Jan ($\lambda=060^\circ\text{Ls}$) at $\omega=168^\circ\text{W}$ et al, but the seeing remained too poor to yield the isolated Montes. The observations by Mk on 7 Jan ($\lambda=054^\circ\text{Ls}$) were made at $\omega=274^\circ\text{W}$, 284°W , 293°W , 303°W , 313°W , and finally caught S Sabaeus. On 25 Jan ($\lambda=062^\circ\text{Ls}$) at $\omega=104^\circ\text{W}$, 114°W he saw the evening cloud near the Tharsis district but could not well discriminate. Nj and Mn at the Fukui Prefecture (quite snowy country) chased the area of Syrtis Mj on the rare days on 16 Jan ($\lambda=058^\circ\text{Ls}$) and 17 Jan ($\lambda=058^\circ\text{Ls}$) as aforementioned, and on 31 Jan ($\lambda=064^\circ\text{Ls}$) observed from $\omega=016^\circ\text{W}$ to 040°W to catch M Acidalium and a bit of S Meridiani but the seeing remained very poor and stopped observing finally. They left the cars on the way and the dome was snow-bound.

Finally Kn pointed out that Km's colour image on 31 Jan ($\lambda=064^\circ\text{Ls}$) at $\omega=045^\circ\text{W}$ shows clearly the white Argyre area at the southern limb similar to the one taken by the HST on 25 Feb 1995 (see LtE#395). This Km's image shows also quite a dark segment of M Acidalium along the boundary of the npc, which was also already apparent on DPK's images taken on 18 Jan ($\lambda=059^\circ\text{Ls}$) at $\omega=051^\circ\text{W}$.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120131/Km31Jan12.jpg>
<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120118/DPK18Jan12.jpg>

We Further Received from PGc made on 2 Nov ($\lambda=024^\circ\text{Ls}$) at $\omega=076^\circ\text{W}$ when $\delta=6.0''$: Solis L is visible. Freddy(FWL)'s images are from 7 and 12 September before the spring equinox: The former was at $\omega=348^\circ\text{W}$ where M Serpentis is shot and the latter was at $\omega=306^\circ\text{W}$ where Syrtis Mj and a slightly light Hellas were visible. The angular diameter on 7 Sept ($\lambda=357^\circ\text{Ls}$) was $\delta=4.8''$. (M MINAMI & M MURAKAMI)

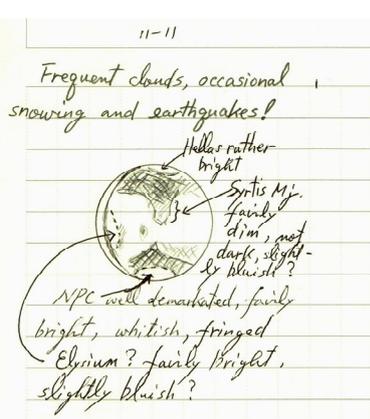
Letters to the Editor

●.....**Subject: Drawings of Mars**
Received: Wed 11 Jan 2012 14:00 JST

Dear Dr. Minami, Attached are the latest drawings of Mars.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120107/Kn07Jan12.jpg>
<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120109/Kn09Jan12.jpg>

Extremely changeable weather around here has been breaking the forecasters' hearts lately, all kinds of weather in a single night, frequent aftershocks to boot!...some seismologists suggest they can be the foreshocks for a possible massive another earthquake in



the near future. Just hope the weather will look up soon, because the exciting aphelion Tharsis ~ Amazonis ~ Elysium hemisphere (though may be photogenically boring side) is turning observable from our longitude.

Good Seeing with Excellent Scopes!

○.....**Subject: A moonlit night**
Received: Fri 13 Jan 2012 03:39 JST

Dear Dr. Minami, The moon is bright enough for me to read the thermometer on the wall of my small dome which says eight degrees below zero! Mars in the X500 field of my Baader Planetarium 60° binoviewr is swelling up to 1.5 times, pulsating and drifting, suggesting different layers of current in the atmosphere above. No Syrtis Major, no Elysium nor even NPC, I think I'd better go to bed!

Good Seeing with Excellent Scopes!

○.....**Subject: Drawings of Mars**
Received: Tue 17 Jan 2012 23:57 JST

Dear Dr. Minami, Attached here are my latest drawings of Mars. As the apparent diameter of the planet exceeded $10''$ I have changed the size of the drawing from 3cm up to 4cm across. It's almost midnight and the sky's clear now, Mars is already low in the eastern sky. But I am wondering if I should go observing or not; I've been slightly feverish since

this morning, may be just a cold, not flu. Please take care not to catch a cold too.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120113/Kn13Jan12.jpg>

Good Seeing with Excellent Scopes!

○.....*Subject: A Drawing of Mars 29Jan2012 2010 GMT*
Received: Tue 31 Jan 2012 00:06 JST

Dear Dr. Minami, I am attaching my latest drawing of Mars. Transparency was good before dawn, gorgeous summer Milky Way on the eastern mountain range, but a cold wind was wailing outside my small dome.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120129/Kn29Jan12.jpg>

Good Seeing with Excellent Scopes!

Reiichi KONNAI (Fukushima, JAPAN)

●.....*Subject: Mars 2012/01/09-Kumamori*
Received: Wed 11 Jan 2012 23:10 JST

Masatsugu MINAMI sama, This is a shot after a while. I attached the B image in addition to LRGB. At present by trial and error I am groping the size of magnification.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120109/Km09Jan12.jpg>

○.....*Subject: Mars 2012/01/17-Kumamori*
Received: Wed 18 Jan 2012 18:30 JST

Masatsugu MINAMI-sama, As these days the weather has been unstable, it is hard for me to get up timely. This is just one from 17 January. With best wishes:

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120117/Km17Jan12.jpg>

○.....*Subject: Mars 2012/01/26-Kumamori*
Received: Fri 27 Jan 2012 21:47 JST

Masatsugu MINAMI-sama, Cold and dismal weather continued. However yesterday, though it snowed lightly, the sky became clear at night.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120126/Km26Jan12.jpg>

It appeared the npc was less bright. Best wishes,

○.....*Subject: Mars 2012/01/27-Kumamori*
Received: Sat 28 Jan 2012 11:24 JST

Masatsugu MINAMI-sama. It became thinly cloud and seeing became poor. Solis L is dark.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120127/Km27Jan12.jpg>

○.....*Subject: Mars 2012/01/30-Kumamori*
Received: Tue 31 Jan 2012 21:06 JST

Masatsugu MINAMI-sama; The sky is fair but clouds float and the seeing is unstable. A dark segment adjacent to the npc was shot (the same one taken by Don PARKER on 18 Jan ($\lambda=059^\circ\text{Ls}$) at $\omega=051^\circ\text{W}$). Best wishes

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120130/Km30Jan12.jpg>

○.....*Subject: Mars 2012/01/31-Kumamori*
Received: Wed 01 Jan 2012 21:17 JST

Masatsugu MINAMI-sama: The seeing remains unstable due to the present cold wave which I hope passes earlier. Best

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120131/Km31Jan12.jpg>

Teruaki KUMAMORI (Sakai-Osaka, JAPAN)

●.....*Subject: Mars - Jan.9th, 2012*
Received: Thu 12 Jan 2012 03:18 JST

Hi Mr. Minami, Here is my latest processed session from Jan. 9th, 2012.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120109/EMr09Jan12.jpg>

○.....*Subject: Mars - January 22nd, 2012*
Received: Fri 27 Jan 2012 02:59 JST

Hi Mr. Minami, My latest session from the 22nd of Jan:

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120122/EMr22Jan12.jpg>
 Clear Skies.

○.....*Subject: Mars - January 27th, 08:31ut*
Received: Wed 01 Feb 2012 05:19 JST

Hi Mr Minami, Here is my most recent session from the 27th of January, Clear Skies.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120127/EMr27Jan12.jpg>

Efrain MORALES (PUERTO RICO)

●.....*Subject: Mo 09 Jan_12*
Received: Fri 13 Jan 2012 00:27 JST

Masatsugu MINAMI sama, We had a lot of clouds on 9 Jan, but a bit good seeing. I wished I could make the image to be more in good colour.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120109/Mo09Jan12.jpg>

Best wishes

Yukio MORITA(Hatsuka-ichi, Hiroshima, JAPAN)

●.....*Subject: Mars image - Jan. 11, 2012*
Received: Fri 13 Jan 2012 11:37 JST

Gentlemen, Attached is an image from Jan. 11. Seeing was above average.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120111/PGc11Jan12.jpg>

○.....*Subject: Additional Mars from Jan. 11*
Received: Sun 15 Jan 2012 10:53 JST

Gentlemen, This set of images was captured about an hour earlier than the image I previously submitted. Seeing was not as good, but you really can tell that from the processed images which turned out pretty good.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120111/PGc11Jan12.jpg>

○.....*Subject: Mars image - Jan. 15*
Received: Mon 16 Jan 2012 03:07 JST

Gentlemen, Attached is a set of images from this morning. Seeing was less than average, the temperature was -12°C with some wind.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/PGc15Jan12.jpg>

○.....*Subject: Mars image - Jan. 16*
Received: Sat 21 Jan 2012 14:29 JST

Gentlemen, Attached is a set of Mars images from January 16. Seeing conditions were about average. Regards,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120116/PGc16Jan12.jpg>

○.....*Subject: Mars image - Jan. 22, 2012*
Received: Fri 27 Jan 2012 13:41 JST

Gentlemen, Attached is a set of images from January 22. Seeing was poor.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120122/PGc22Jan12.jpg>

○.....*Subject: Mars Images - Jan. 28*
Received: Sun 29 Jan 2012 10:28 JST

Gentlemen, This is the first and probably the best set of a two hour period. Seeing was below average. At times during this session Mars appeared to be just a featureless blob. I have not had a chance to process the other images from this session yet, but I don't expect much. Regards

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120128/PGc28Jan12.jpg>

○.....*Subject: Mars image - Jan. 30*
Received: Wed 01 Feb 2012 14:35 JST

Gentlemen, Attached is a set of image that was captured under better than average seeing. Regards,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120130/PGc30Jan12.jpg>

Peter GORCZYNSKI (Oxford, CT)

●.....*Subject: Mars 2012/01/13*
Received: Fri 13 Jan 2012 17:40 JST

Hello, Here is Mars on 2012/01/13. The seeing was average while the transparency was poor. T = +3.6°C

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120113/JPp13Jan12.jpg>

○.....*Subject: Mars 2012/01/14*
Received: Sat 14 Jan 2012 21:15 JST

Hello, Here is Mars on 2012/01/14. The seeing was average. The transparency was fair. T = -1.5°C.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120113/JPp13Jan12.jpg>

○.....*Subject: Mars 2012/01/15*
Received: Sun 15 Jan 2012 18:00 JST

Hello, Here is Mars on 2012/01/15. The seeing was average. The transparency was average. T = -1.7°C

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/JPp15Jan12.jpg>

○.....*Subject: Mars 2012/01/17*
Received: Tue 17 Jan 2012 18:19 JST

Hello, Here is Mars on 2012/01/17.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120117/JPp17Jan12.jpg>

The seeing was average. The transparency was average. T = -4.8°C. Regards

Jean-Jacques POUPEAU (Essonne, FRANCE)

●.....*Subject; RE: Sincere Sympathy*
Received: Sat 14 Jan 2012 02:03 JST

Dear Masatsugu, I am very touched by your kind words. Many thanks.

I am looking forward to reading Don's Six Decades of Observing Mars. I am not yet up to fifty years myself.

Now in the midst of consolidating plans for my revisit to Europe--and hoping to train many historic telescopes on Mars as it approaches its early March opposition (very similar in circumstances to the first I observed, that of March 9, 1965). I also am preparing a talk, "Whatever happened to the canals of Mars?" which I am to give along with another on the transit of Venus at AstroFest in London, before I set out for the Continent. Hopefully I will be able to write up brief reports for CMO of my experiences along the way. Ever,

○.....*Subject: Sixty years of Mars observations*
Received: Sat 21 Jan 2012 09:35 JST

Dear Don, Thanks for a superb essay of your experiences as a Mars observer (and thanks Masatsugu for pursuing and publishing this important essay). What a rich life you've led!--as Falstaff tells Prince Hal in Henry IV, part II, act 3, scene 2.

I learned a great deal, and was deeply inspired. (I wished I had known Chick better; I corresponded with him a bit, but was just getting underway with that when he suddenly and unexpectedly died. Earlier, when I was at Lowell in 1982, when he was there, I desperately wanting to interact with him. Bill Hoyt (my host) however said he wasn't a real astronomer, just a professional observer (!) And I interpreted his gentle nature--and shyness--as arrogance. Pride and prejudice. The reality was that I was too timid to approach him. If I'd had ten minutes with him then I would cherish it as one would the Hope Diamond.)

Well done, Don. You have furnished a document for the ages. Hoping we meet up, sooner rather than later.

Best wishes,

Bill SHEEHAN (Willmar, MN)

●.....*Subject: mars 15 Jan*
Received: Mon 16 Jan 2012 21:40 JST

Dear Masatsugu, Thank you for your mail. But sorry to say still I am confused so that by fixing the Date and time (GMT): here in my country there is 3.30 Hour different time with GMT. I will send new image to you by new set up, I hope I could get your comment accordingly, is that Ok?

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/SGh15Jan12.jpg>

○.....*Subject: mars 16 Jan.*
Received; Wed 18 Jan 2012 01:19 JST

Hi, On 16 January seeing was poor & average atmosphere. PLS see it.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120116/SGh16Jan12.jpg>

○.....*Subject: mars 21 Jan*
Received: Sun 22 Jan 2012 22:51 JST

Hi, Poor seeing & unstable atmosphere I took one image of Mars. PLS see it.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120121/SGh21Jan12.jpg>

○.....*Subject: mars 22 Jan*
Received: Tue 24 Jan 2012 04:17 JST

Hi, Under poor seeing & average atmosphere I took one image of Mars. PLS see it.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120122/SGh22Jan12.jpg>

○.....*Subject: Mars 23 Jan*
Received: Wed 25 Jan 2012 07:40 JST

Hi, On 23 January I took one image of Mars; always condition was bad when I observe. PLS see them.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120123/SGh23Jan12.jpg>

○.....*Subject: Mars 29 Jan*
Received: Tue 31 Jan 2012 08:02 JST

Hi; Conditions were about average when this was taken this MIDNIGHT. there was a lot of unstable but I PICK OUT fair frames: Regards

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120129/SGh29Jan12.jpg>

Sadegh GHOMIZADEH (Tehran, IRAN)

●.....*Subject: mars sketches 15/01/'12*
Received: Sun 15 Jan 2012 20:53 JST

Hi, here are my sketches from January 15

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/KSm15Jan12.jpg>

Greetings,

Kris SMET (Bornem, BELGIUM)

●.....*Subject: Mars 2012-01-15-05-22-00-UT*
Received: Sun 15 Jan 2012 22:15 JST

Hi all, here my first Mars image this year.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/SKw15Jan12.png>

○.....*Subject: Mars 2012-01-16*
Received; Wed 18 Jan 2012 01:22 JST

Hi, here my images from 16th January 2012.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120116/SKw16Jan12.png>

I am really astonished, how much one can see on the small Martian disc.

○.....*Subject: Mars 2012-01-18*
Received: Thu 19 Jan 2012 10:03 JST

Hi, here are my Mars images from 18th January 2012. Now mad weather is coming, so I cant capture more images the next days...

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120118/SKw18Jan12.png>

Cheers

Silvia KOWOLLIK (Ludwigsburg, GERMANY)

●.....*Subject: Mars Drawings 13 Jan 12*
Received: Sun 15 Jan 2012 22:36 JST

Dear Masatsugu and Masami; These are the Mars drawings from 13 January.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120113/Kz13Jan12.jpg>

Best wishes,

Ichiro KOHZAKI (Tokyo, JAPAN)

●.....*Subject: My first Mars image for the year*
Received: Mon 16 Jan 2012 09:52 JST

Hi everyone, The seeing was better than what I'm used to in the mornings and also had some cloud trouble but one of the RGB sets was good enough for processing.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/SBd15Jan12.jpg>

It's been a long time since I've seen blue haze over Syrtis Major.

○.....*Subject: Mars this morning*
Received: Sun 22 Jan 2012 14:18 JST

Hi everyone, The seeing this morning was mediocre at best.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120121/SBd21Jan12.jpg>

There appears to be some detail visible on the edge of the NPC that I don't know what to make of. It does not seem to match what my planetarium programs are showing in that spot. Regards,

○.....*Subject: Mars RGB set*
Received: Sun 29 Jan 2012 17:19 JST

Hello everyone, The attached image was captured in mediocre seeing. Regards,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120128/SBd28Jan12.jpg>

Stefan BUDA (Melbourne, AUSTRALIA)

●.....*Subject: Mars: January 16, 2012*
Received: Tue 17 Jan 2012 03:41 JST

Hi - I have attached my latest image of Mars January 16, 2012 to be posted. It seems to show some irregularities along the edge of the NPC especially in red light. Thanks,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120116/FM116Jan12.jpg>

○.....*Subject: Mars: January 29, 2012*
Received: Mon 30 Jan 2012 15:30 JST

Hi - I have attached my latest image of Mars January 29, 2012 to be posted. Thanks,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120129/FM129Jan12.jpg>

Frank J MELILLO (Holtsville, NY)

●.....*Subject: Mars 2012 Jan 15*
Received: Tue 17 Jan 2012 15:13 JST

Dear all, Attaching my latest Mars image from January 15, with a distinct cap, limb haze and a bright Chryse and Argyre. A wonderful view in the scope at $\times 480$!

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/JW15Jan12.jpg>

○.....*Subject: Mars 2012 Jan 19*
Received: Tue 24 Jan 2012 19:45 JST

Dear all, Attaching an image from January 19.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120119/JW19Jan12.jpg>

Best regards,
Johan WARELL (Skivarp, SWEDEN)

●.....*Subject: Mars on 14 and 15 January 2012*
Received: Wed 18 Jan 2012 02:47 JST

Dear Masatsugu, Attached are two set of images of Mars from the mornings of 14-January and 15-January. Clouds are

showing over Tharsis and Arcadia. There is also an interesting V shaped feature in the North Polar region near 180°W and 70°N that appears to have some extension to it.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120115/WF115Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120114/WF114Jan12.jpg>

Best Regards,

○.....*Subject: Mars on 28 January 2012*
Received: Sun 29 Jan 2012 08:06 JST

Dear Masatsugu, Attached is a set of images of Mars from this morning, 28-January. Seeing was average but deteriorated quickly as Mars approached the meridian so I was only able to get one good set. The color composite shows a bluish tint near the terminator over Syrtis Major. Best Regards,

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120128/WF128Jan12.jpg>

○.....*Subject: Mars on 30 January 2012*
Received: Thu 02 Feb 2012 12:57 JST

Dear Masatsugu, Thanks for your comments on the 28 January images! Also, thanks for the reference to your very interesting article from 1999 about the phenomenon of the bluish appearance of Syrtis Major when it is near the terminator.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120130/WF130Jan12.jpg>

I have attached a set of images from the morning of 30 January. I spent some time refining the wavelet enhancement I have been using on Mars and I seemed to be getting slightly better results than before. I used the new enhancement on the 30 January image. I also reprocessed the 28 January image and I am sending you the new revision of that image set. Compared to the 28 January image, Syrtis Major has rotated an additional 16 degrees from the terminator in the 30 January image. Syrtis Major is still showing the bluish tint that was noticeable in the earlier image. Best Regards,

Bill FLANAGAN (Houston, TX)

●.....*Subject: Mars 11 January*
Received: Thu 19 Jan 2012 08:45 JST

Hi All, I have attached RGB and UV Mars images from 11 January. Tharsis clouds remain very prominent.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120111/DPk11Jan12.jpg>

○.....*Subject: Mars 18 January*
Received: Sun 22 Jan 2012 16:19 JST

Hi All, I have attached RGB Mars images from 18 January.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120118/DPk18Jan12.jpg>

○.....*Subject: Mars 24 January*
Received: Thu 26 Jan 2012 14:04:59 JST

Hi All, I have attached RGB Mars images from 24 January. Small clouds over Moab and Arabia and a light haze over Chryse visible. Rifts appear along the NPC edge. Mediocre seeing and gusty winds did not allow ultraviolet imaging.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120124/DPk24Jan12.jpg>

○.....*Subject: Mars 27 January*
Received: Wed 01 Feb 2012 06:53:39 JST

Hi All, I have attached RGB Mars images from 27 January. Interesting rifts developing in the NPC. Best

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120127/DPk27Jan12.jpg>

Don PARKER (Coral Gables, FL)

●.....*Subject: Mars last 17th*
Received: Thu 19 Jan 2012 15:43 JST

Good morning, Here is the report for the 17th morning

Mars observation. Have good receipt:

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120117/SMk17Jan12.jpg>

Stanislas MAKSYMOWICZ(Ecquevilly, FRANCE)

●.....*Subject: Mars, Jan 19*
Received: Fri 20 Jan 2012 16:16 JST

Hi all, here is a Mars image from this morning, under not-great (but not-awful) seeing. This is an IR image only.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120119/AWs19Jan12.jpg>

regards,
Anthony WESLEY (NSW, AUSTRALIA)

●.....*Subject: Mars Ak19Jan12*
Received: Sat 21 Jan 2012 18:30 JST

MINAMI-sama, It seems the rainy season ended in Cebu:

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120119/Ak19Jan12.jpg>

○.....*Subject: Mars Ak24Jan12*
Received: Wed 25 Jan 2012 06:59 JST

MINAMI-sama. These are the Mars images from 24 January. I even feel cool with a T-shirt on the rooftop.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120124/Ak24Jan12.jpg>

○.....*Subject: Mars Ak27Jan12*
Received: Sun 29 Jan 2012 00:27 JST

MINAMI-sama: These are two sets of Mars images from 27 January. Best

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120127/Ak27Jan12.jpg>

○.....*Subject: Mars Ak28Jan12*
Received: Sun 29 Jan 2012 23:27 JST

MINAMI-sama: These are from 28 January GMT. KUMAMORI is of the opinion that the reason why the morning limb is doubled must not be because of the optical system, but due to a defect of the camera I use.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120128/Ak28Jan12.jpg>

○.....*Subject: Mars Ak30Jan12*
Received: Tue 31 Jan 2012 03:16 JST

MINAMI-sama: These are two sets of Mars images from 30 January. There seems to exist a rift inside the npc.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120130/Ak30Jan12.jpg>

Tomio AKUTSU (Cebu, the PHILIPPINES)

●.....*Subject: Mars images (January 17th, 2012.)*
Received: Wed 25 Jan 2012 04:36 JST

Hi all, Here are some images from Jan 17th in fair conditions. Sinus Meridiani and Mare Acidalius are prominent on the disk.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120117/DPc17Jan12.jpg>

Some bright haze over Argyre, and patchy cloud over Arabia/Moab. Bright limb cloud extending into Chryse.

Best Wishes

○.....*Subject: Mars images (January 27th, 2012.)*
Received: Wed 01 Feb 2012 05:55 JST

Hi all, Poor seeing on this morning but I was determined to

catch Syrtis Major on this rotation. Bright Elysium orographics. There is also an interesting bright patch projecting from the NPC on the bright limb. Best Wishes

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120127/DPc27Jan12.jpg>

Damian PEACH (Selsey, the UK)

●.....*Subject: Mars images*
Received: Thu 26 Jan 2012 12:36 JST

I will upload my Mars images from this apparition. The date's are clearly marked on the images. I hope you can accept the images as they are, I will arrange them more carefully next time.

I also use different camera's so that's why some images look different than the other. I use the DMK618 with RGB Astrodon Filters and DBK618 color camera.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120119/FW119Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120114/FW114Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120108/FW108Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120107/FW107Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120105/FW105Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120101/FW101Jan12.jpg>

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/110912/FW112Sept11.jpg>

○.....*Subject: Re: Mars images - January 19, 2012.*

Received: Fri 27 Jan 2012 16:37 JST

Hi Masatsugu, You arranged everything very nice! Really nice website and presentations. I will keep sending my Mars observations regularly and hope for good weather and seeing. Thanks again.

Freddy WILLEMS (Waipahu, HI, the US)

●.....*Subject: Mars this morning*
Received: Mon 30 Jan 2012 03:10 JST

Well, when you have not imaged in a while expect things to go wrong and, in my case, they did. Luckily I was able to manage One AVI! I started out observing doubles in Orion. Using a Collins I3 eyepiece and a Hydrogen Alpha filter I observed the Horsehead Nebula for the first time (from Downtown Charleston)! Thanks to Bob Schilling for telling me how to do this!! Just a dark blob, no detail. I then left the observatory for a much needed bowl of ice cream and waited for Mars. Just as I got started (and made the one AVI) the motor on my mount stalled!! I had run the 12V battery down while inside waiting on Mars! Then, when I tried to shut the dome, the shutter was stuck and it took a while pushing and pulling 20-30 ft above the ground on a 2 ft ledge at 2:00AM to get things straightened out. Here is my one image FYI. Best

<http://www.hida.kyoto-u.ac.jp/~cmo/cmons/2011/120129/JPh29Jan12.jpg>

Jim PHILLIPS (Charleston, SC)

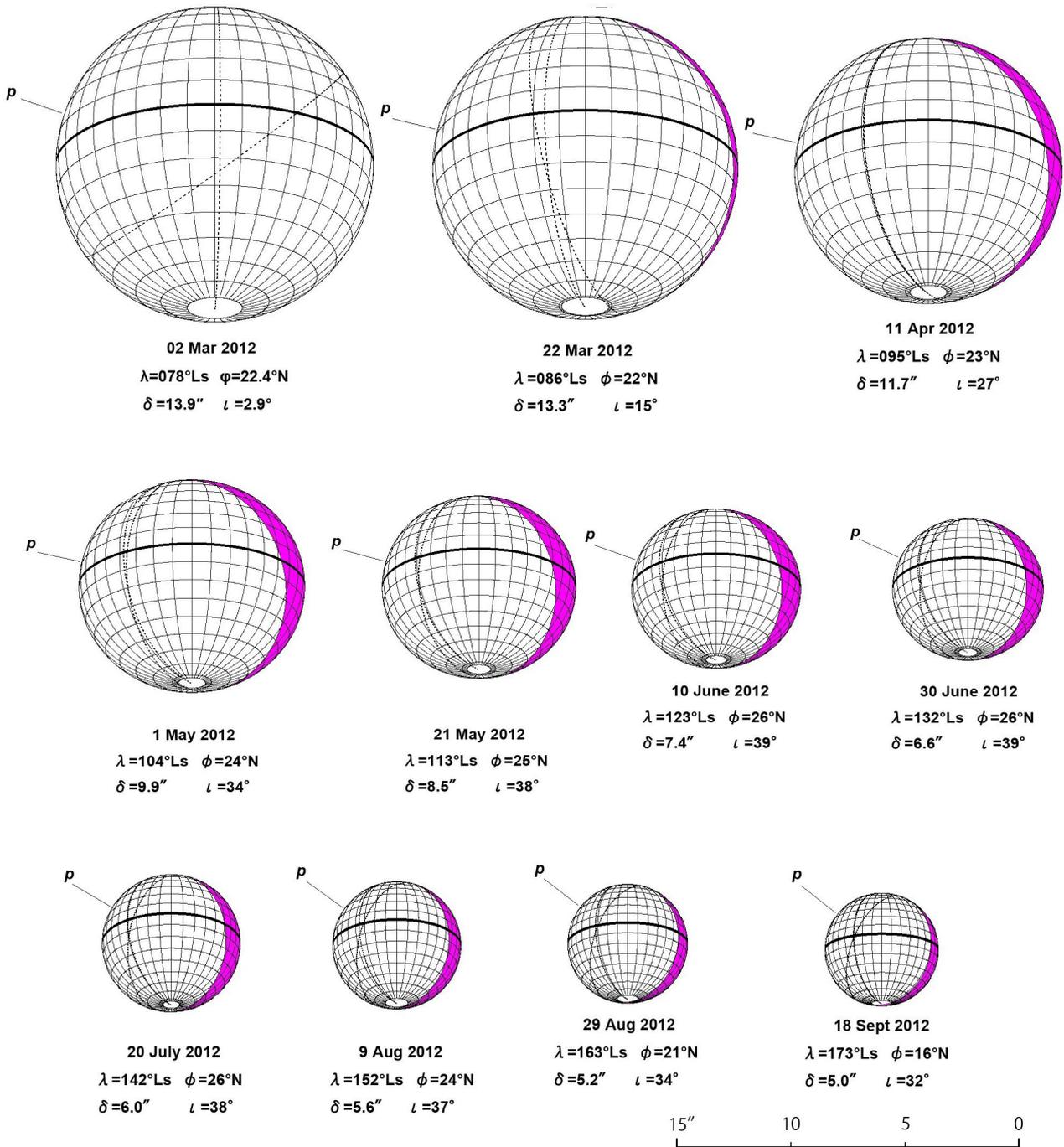
☆☆☆

2011/2012 Mars

Discs with Grids. II

Akinori NISHITA

The following images are the Martian discs with the grids and the phases (at 00:00 GMT) from 2 Mar 2011, just near the opposition, to 18 Sept 2012. The noon line (*n*-line) is shown as a dotted line: The intersection with the other line (*m*-line) is the sub-Solar point.



Discs with Grids I, where the discs from 4 Sept 2011 to 2 Mar 2012 are treated, are in CMO#389 p.Ser-0189.

Ephemeris for the Observations of the 2011/12 Mars. VIII

March 2012

Masami MURAKAMI

As a sequel to the preceding list of the Ephemeris for the physical observations of Mars, we here list up the necessary elements of the Ephemeris for period from 26 February 2012 to 5 April 2012: The data are listed for every day at 00:00 GMT (not TDT). The symbols ω and ϕ denote the Longitude and Latitude of the

sub-Earth point respectively. The symbols λ , δ and ι stand for the Areocentric Longitude of the Sun, the Apparent Diameter and the Phase Angle respectively. We also add the column of the Position Angle Π of the axis rotation, measured eastwards from the north point: This is useful to determine the north pole direction from the $p \leftarrow$.

The Apparent Declination of the planet is also given at the final column (denoted as D). The data here are basically based on *The Astronomical Almanac for the Year 2012*.

Date (00:00GMT)	ω	φ	λ	δ	ι	Π	D
26 February 2012	306.00°W	22.5°N	075.45°Ls	13.73"	6.2°	19.8°	+09°17'
27 February 2012	297.31°W	22.5°N	075.89°Ls	13.77"	5.4°	19.6°	+09°26'
28 February 2012	288.62°W	22.5°N	076.33°Ls	13.80"	4.8°	19.4°	+09°35'
29 February 2012	279.92°W	22.5°N	076.77°Ls	13.82"	4.2°	19.1°	+09°43'
01 March 2012	271.24°W	22.5°N	077.20°Ls	13.85"	3.5°	18.9°	+09°52'
02 March 2012	262.56°W	22.4°N	077.64°Ls	13.87"	2.9°	18.7°	+10°01'
03 March 2012	253.88°W	22.4°N	078.08°Ls	13.88"	2.8°	18.5°	+10°10'
04 March 2012	245.18°W	22.4°N	078.51°Ls	13.89"	2.9°	18.2°	+10°18'
05 March 2012	236.51°W	22.4°N	078.95°Ls	13.89"	3.0°	18.0°	+10°27'
06 March 2012	227.82°W	22.4°N	079.38°Ls	13.90"	3.1°	17.8°	+10°35'
07 March 2012	219.14°W	22.4°N	079.82°Ls	13.89"	3.7°	17.6°	+10°43'
08 March 2012	210.45°W	22.3°N	080.26°Ls	13.88"	4.4°	17.3°	+10°51'
09 March 2012	201.76°W	22.3°N	080.69°Ls	13.87"	5.0°	17.1°	+10°59'
10 March 2012	193.07°W	22.3°N	081.13°Ls	13.86"	5.6°	16.9°	+11°07'
11 March 2012	184.37°W	22.3°N	081.57°Ls	13.83"	6.4°	16.6°	+11°14'
12 March 2012	175.66°W	22.3°N	082.01°Ls	13.81"	7.2°	16.4°	+11°21'
13 March 2012	166.95°W	22.3°N	082.45°Ls	13.78"	7.9°	16.2°	+11°29'
14 March 2012	158.24°W	22.2°N	082.89°Ls	13.75"	8.7°	16.0°	+11°35'
15 March 2012	149.51°W	22.2°N	083.33°Ls	13.71"	9.5°	15.8°	+11°42'
16 March 2012	140.78°W	22.2°N	083.77°Ls	13.66"	10.2°	15.6°	+11°48'
17 March 2012	132.04°W	22.2°N	084.20°Ls	13.62"	11.0°	15.4°	+11°54'
18 March 2012	123.29°W	22.2°N	084.64°Ls	13.57"	11.7°	15.1°	+12°00'
19 March 2012	114.53°W	22.2°N	085.08°Ls	13.51"	12.5°	14.9°	+12°06'
20 March 2012	105.76°W	22.2°N	085.52°Ls	13.46"	13.2°	14.8°	+12°11'
21 March 2012	096.98°W	22.2°N	085.96°Ls	13.40"	14.0°	14.6°	+12°16'
22 March 2012	088.18°W	22.2°N	086.40°Ls	13.34"	14.7°	14.4°	+12°21'
23 March 2012	079.38°W	22.2°N	086.84°Ls	13.27"	15.4°	14.2°	+12°25'
24 March 2012	070.56°W	22.2°N	087.28°Ls	13.20"	16.1°	14.0°	+12°29'
25 March 2012	061.73°W	22.2°N	087.72°Ls	13.13"	16.7°	13.9°	+12°33'
26 March 2012	052.89°W	22.2°N	088.16°Ls	13.06"	17.4°	13.7°	+12°36'
27 March 2012	044.03°W	22.2°N	088.60°Ls	12.98"	18.1°	13.6°	+12°39'
28 March 2012	035.17°W	22.2°N	089.04°Ls	12.90"	18.8°	13.4°	+12°42'
29 March 2012	026.28°W	22.2°N	089.48°Ls	12.82"	19.4°	13.3°	+12°45'
30 March 2012	017.39°W	22.2°N	089.92°Ls	12.74"	20.1°	13.2°	+12°47'
31 March 2012	008.48°W	22.2°N	090.36°Ls	12.66"	20.7°	13.0°	+12°49'
01 April 2012	359.55°W	22.2°N	090.81°Ls	12.57"	21.3°	12.9°	+12°50'
02 April 2012	350.61°W	22.3°N	091.25°Ls	12.49"	21.9°	12.8°	+12°52'
03 April 2012	341.66°W	22.3°N	091.69°Ls	12.40"	22.5°	12.7°	+12°52'
04 April 2012	332.69°W	22.3°N	092.13°Ls	12.31"	23.1°	12.6°	+12°53'
05 April 2012	323.71°W	22.3°N	092.58°Ls	12.22"	23.6°	12.6°	+12°53'

- - -

TEN YEARS AGO (2012)

---CMO #257 (25 February 2002) pp3251~3274---

<http://www.hida.kyoto-u.ac.jp/~cmo/cmomn2/cmo257/index.htm>

The 20th report in 2001/2002 dealt with the period from the latter half of January 2001 to the first half of February 2002. The planet Mars was in the evening Psc, and the angular diameter δ was about 5". The tilt was near 24°S. The Martian season λ was from 310°Ls to 327°Ls: the spc was still visible. Details were no more possible while we received domestically a total of 56 observations from 6 observers and from abroad we received 14 observations from 4 members. In the US, Don PARKER (DPK) was active,

and covered the region from M Cimmerium to Solis L. In Japan the weather was dismal but MINAMI (Mn) caught the chance from the time before sunset when it was bright. KUMAMORI (Km)'s 60cm also yielded several markings. From Japan it was observed from the areas of S Sabaeus, Hellas, Syrtis Mj, M Cimmerium. From Europe we received only one observation from D PEACH (DPc).

Notable is that we further received precious 43 images from DeGROFF (KGr) from the Marshall islands: They included the images of before and after the great dust event in May~July 2001.

The third 2001 Mars CMO Note was about "Dust Streaks at the Area of Solis L on 6 July 2001 (Day 13)": On 6 July 2001, 13 days after the occurrence of the global dust storm there was seen two dust streaks near Solis L and it was chased up until October. The season was different but they were similar to the ones observed in 1973.

<http://www.hida.kyoto-u.ac.jp/~cmo/cmomn0/01Note03/index.htm>

The Forthcoming 2001 Mars (15) column was written by NISHITA (Ns) and includes "Ephemeris for the 2001 Mars. VII":

<http://www.hida.kyoto-u.ac.jp/~cmo/cmo/coming2001/0115/15.html>

The LtE corner shows those from MELILLO (NY), Dave MOORE (AZ), Jim BELL (NY), DPK (FL), COLVILLE (Canada), SHERROD (AR), GRAFTON (TX), SHEEHAN (MN), KGr (Marshall Islands) and also domestically from AKUTSU, ISHADOH, Takeshi (Ken) SATO, HORIKAWA. Mk's emails were also cited as correspondences from Fujisawa.

As a second obituary column Ken SATO wrote about the late Mr Toshi-hiko OSAWA.

TSUNEMACHI's 16th essay was about a shellfish work called "Yakoh-Gai" in Japanese whose scientific name is *Lunnatia marmorata*, and so it is suggestive of the Moon light.

TYA#078 dealt with CMO#114 (25 Feb 1992): The opening note (Note (4)) was about "The SPC at the Final Stage in 1990." The planet Mars 20 years ago was at Cap and not yet the season of Mars. (Mk & Mn)

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東洋天文学會『火星通信』since 1986

MARS

No. **257**
25 February 2002

OBSERVATIONS Published by the OAA Mars Section
CMO 2001 Mars Report # 20 OAA Mars Section

HERE we deal with the period from
16 January 2002 (310°Ls) to 15 February 2002 (327°Ls)
in which the apparent angular diameter δ went down from 3.9" to 5.1". It was not so hopeless still because the apparent declination was increasing (it went up across the celestial equator from -1.3° to 7.8° during the period). The problem was rather the winter weather. The central latitude ϕ was down from 26.5°S to 24°S. The phase angle α was also down from 37° to 32°.

☆.....今回は次の報告を扱う:
16 Jan 2002 (310°Ls) から 15 Feb 2002 (327°Ls) まで
この期、視面径は5.9"から5.1"に落ちた。観測の弊していることだが最悪ではない。観測はますます難しくなる。視面径はこの期間-1.3°から赤道を越え、7.8°までになった。視面では辛くなった。中央緯度は26.5°から24°に落ちた。方位角は6.3°から32°と戻っている。季節に順じては、観測に有利な要素である。観測は今年冬の気候は不安定であった種だが、Mkは嵐前などで観測を断したと聞いている。Mk氏は観測が短びていくことが心配だが、報告でもMk氏は今年冬の前後に間に合わず、土日が空けて観測がなかった(2002年)には観測出来た、次期報告)。

ISHADOH, Hiroshi 伊香登 弘 (04) 那覇 Naha, Okinawa, Japan
6 Drawings (20, 21 January, 3, 4, 6, 13 February 2002) 400, 530x31cm speculum
KUMAMORI, Tereaki 熊森 照明 (Km) 堺 Sakai, Osaka, Japan
9 CCD Colour Images (19, 24 January, 3, 6, 15 February 2002)
60cm Cassegrain with a Sony TRV-900
MELILLO, Frank J フランク・メリッロ (FM) 紐約 Hoboken, NY, USA
1 CCD Images (26 January 2002) 20cm SCT with a Starlight Xpress MX5
MINAMI, Masatsugu 南 政次 (Mn) 福井 Fukui, Japan
26 Drawings (19 January, 4, 6, 13, 15 February 2002)
600, 480, 400x20cm ED Goto reflector*

3 2 5 1

C M O Fu Ku I

T NAKAJIMA (Nj)

★ We this time acknowledge a kind donation from Hiroshi ISHADOH (456).

International Society of the Mars Observers (ISMO)

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CMO #394/ ISMO #20 (25 February 2012)

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